

Glutaric acid, 1-methoxydec-4-yl pentadecyl ester

Inchi:	InChI=1S/C31H60O5/c1-4-6-8-10-11-12-13-14-15-16-17-18-20-28-35-30(32)25-21-26-31
InchiKey:	LVFMLNLYOAIKFR-UHFFFAOYSA-N
Formula:	C31H60O5
SMILES:	CCCCCCCCCCCCCCCCOC(=O)CCCC(=O)OC(CCCCCC)CCCOC
Mol. weight [g/mol]:	512.81

Physical Properties

Property code	Value	Unit	Source
gf	-365.14	kJ/mol	Joback Method
hf	-1310.27	kJ/mol	Joback Method
hfus	79.28	kJ/mol	Joback Method
hvap	104.93	kJ/mol	Joback Method
log10ws	-9.72		Crippen Method
logp	9.100		Crippen Method
mcvol	468.400	ml/mol	McGowan Method
pc	591.70	kPa	Joback Method
rinpola	3470.00		NIST Webbook
tb	1083.24	K	Joback Method
tc	1377.91	K	Joback Method
tf	590.68	K	Joback Method
vc	1.831	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	1700.97	J/molxK	1083.24	Joback Method
cpg	1786.82	J/molxK	1328.80	Joback Method
cpg	1775.92	J/molxK	1279.69	Joback Method
cpg	1762.01	J/molxK	1230.58	Joback Method
cpg	1744.97	J/molxK	1181.46	Joback Method
cpg	1724.66	J/molxK	1132.35	Joback Method
cpg	1794.82	J/molxK	1377.91	Joback Method
dvisc	0.0000064	Paxs	1083.24	Joback Method
dvisc	0.0000088	Paxs	1001.15	Joback Method

dvisc	0.0000127	Paxs	919.05	Joback Method
dvisc	0.0000197	Paxs	836.96	Joback Method
dvisc	0.0000337	Paxs	754.87	Joback Method
dvisc	0.0000656	Paxs	672.77	Joback Method
dvisc	0.0001538	Paxs	590.68	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=U358479&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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